

ABSTRACT OF DISCLOSURE

An electrically small, planar ultra wide bandwidth (UWB) antenna is disclosed. The antenna has a conductive outer ground area that encompasses a tapered non-conducting clearance area, which surrounds a conductive inner driven area. The feed is unbalanced with the terminals are across the narrowest part of the non-conducting clearance area which is tapered to provide a low VSWR across ultra wide bandwidths exceeding 100%. The antenna can be arrayed in 1D and 2D on a single common substrate. Amplifiers can be readily mounted at the feed.